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March 1, 1996

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Subject: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
Proposed Operating License Change Request 229; Additional Information Supporting Alternate Tube Plugging Criteria Implementation

This letter provides follow-up information in response to conference calls with the NRC staff on January 17, 1996, and February 22, 1996. Enclosure 1 provides our positions with respect to the probe wear and probe variability issues and provides the requested rotating pancake coil no detectable degradation (RPC NDD) data. The upper voltage repair limit calculation and updated database information are still under development and are expected to be submitted the week of March 4, 1996. It is our understanding that the enclosed information is the only remaining information necessary to permit completion of the staff's safety evaluation regarding the subject license change request. Approval of the amendment is requested prior to the start of the Beaver Valley Power Station, Unit No. 1 eleventh refueling outage which is scheduled to start on March 23, 1996. An implementation period of up to 60 days is requested following the effective date of this amendment. In any case, it will be implemented prior to startup from the eleventh refueling outage.

If you have any questions regarding this submittal, please contact Mr. G. A. Kammerdeiner at (412) 393-6855.

Sincerely,

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George S. Thomas
Vice President
Nuclear Planning and Development

c: Mr. L. W. Rossbach, Sr. Resident Inspector
Mr. T. T. Martin, NRC Region I Administrator
Mr. D. S. Brinkman, Sr. Project Manager

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ENCLOSURE 1

Beaver Valley Power Station, Unit No. 1
PROPOSED OPERATING LICENSE
CHANGE REQUEST 229 ADDITIONAL INFORMATION

PROBE WEAR

Duquesne Light Company (DLC) committed to perform probe wear checks in accordance with the proposed industry procedure which was pending NRC approval. If approval of this procedure was not obtained prior to performing the Unit 1 refueling outage 11 (1R11), DLC further committed to perform the probe wear checks in accordance with the criteria approved by the NRC at the last Unit 1 outage for implementation of a 1 volt Interim Plugging Criteria. The probe wear criteria from 1R10 required replacement of probes whose signal amplitudes did not remain within 15% of their initial amplitudes. Furthermore, in such instances where the probe failed the probe wear check, all tubes tested since the last acceptable probe wear check would be reinspected. This criteria is consistent with the requirements of GL 95-05.

Subsequently, the NRC letter from Brian Sheron (NRR) to Alex Marion (NEI) dated February 9, 1996, provided approval of the industry alternative procedure for probe wear criteria subject to modifications noted therein. DLC intends to implement the alternative industry procedure regarding probe wear as detailed in the NEI letter from Alex Marion to Brian Sheron dated February 23, 1996. This letter acknowledges the NRC modifications to the original alternative industry procedure with the exception of reinspection of all intersections in low row tubes (rows 1-9) where entry from both the cold leg as well as the hot leg would be required to conduct the reinspection. All tubes with indications above 75% of the repair limit will be reinspected with an acceptable probe when the probe fails the wear check. Non-affected intersections in those subject tubes will be reinspected as permitted by access from the hot leg side unless cold leg entry is required to reinspect indications on the cold leg side that are above 75% of the repair limit.

PROBE VARIABILITY

Additionally, the industry methodology will be utilized for new probe variability as approved by the NRC and further acknowledged in the NEI letter dated February 23, 1996.

RPC NDD DATA

Attached is the requested RPC data for both Beaver Valley Unit 1 (Table 1) and the other referenced plants (Table 2) to support our request to apply a fraction of the unconfirmed RPC NDD indications in the BOC voltage distribution. The data for Beaver Valley is categorized into 0.1 volt bins by steam generator. The other plant data is categorized into < 1 volt and ≥ 1 volt bins.

As demonstrated by the data in Table 1, the confirmation rate of the most limiting steam generator for RCP NDDs left in service from the previous cycle varies less than 10% as compared to the average for all the steam generators combined. The increased number of data points included in the average confirmation rate of all steam generators provides a better representation of the confirmation rate of the entire spectrum of voltage bins while providing a conservative value for the average confirmation rate for RPC NDD indications above 1 volt which have a more significant contribution to the postulated leakage value.

Table 1

Beaver Valley Unit 1
Distribution of RPC NDD Indications from 1993 RPC Confirmed in 1995

Voltage Bin (1993 Volts)	SG A			SG B			SG C			All SGs Combined		
	1993 RPC NDD Indications			1993 RPC NDD Indications			1993 RPC NDD Indications			1993 RPC NDD Indications		
	No. of Indications RPC Inspected In 1995	1995 RPC Confirmed		No. of Indications RPC Inspected in 1995	1995 RPC Confirmed		No. of Indications RPC Inspected in 1995	1995 RPC Confirmed		No. of Indications RPC Inspected in 1995	1995 RPC Confirmed	
		No. of Indications Confirmed	% Confirmed		No. of Indications Confirmed	% Confirmed		No. of Indications Confirmed	% Confirmed		No. of Indications Confirmed	% Confirmed
0.1	0	0	--	0	0	--	0	0	--	0	0	--
0.2	0	0	--	0	0	--	0	0	--	0	0	--
0.3	0	0	--	0	0	--	0	0	--	0	0	--
0.4	2	2	100.0%	1	1	100.0%	0	0	--	3	3	100.0%
0.5	3	2	66.7%	0	0	--	2	2	100.0%	5	4	80.0%
0.6	3	3	100.0%	0	0	--	0	0	--	3	3	100.0%
0.7	3	3	100.0%	2	1	50.0%	0	0	--	5	4	80.0%
0.8	3	2	66.7%	3	3	100.0%	0	0	--	6	5	83.3%
0.9	2	1	50.0%	3	1	33.3%	0	0	--	5	2	40.0%
1	5	2	40.0%	6	1	16.7%	3	0	0.0%	14	3	21.4%
1.1	11	6	54.5%	4	1	25.0%	1	1	100.0%	16	8	50.0%
1.2	9	6	66.7%	4	0	0.0%	2	0	0.0%	15	6	40.0%
1.3	8	3	37.5%	4	1	25.0%	0	0	--	12	4	33.3%
1.4	4	2	50.0%	1	1	100.0%	2	0	0.0%	7	3	42.9%
1.5	1	1	100.0%	1	1	100.0%	2	1	50.0%	4	3	75.0%
1.6	6	2	33.3%	1	0	0.0%	0	0	--	7	2	28.6%
1.7	0	0	--	0	0	--	1	1	100.0%	1	1	100.0%
1.8	4	2	50.0%	1	1	100.0%	0	0	--	5	3	60.0%
1.9	1	1	100.0%	0	0	--	0	0	--	1	1	100.0%
2	0	0	--	0	0	--	0	0	--	0	0	--
2.1	0	0	--	0	0	--	0	0	--	0	0	--
2.2	0	0	--	0	0	--	0	0	--	0	0	--
2.3	0	0	--	0	0	--	0	0	--	0	0	--
2.4	0	0	--	0	0	--	0	0	--	0	0	--
2.5	0	0	--	0	0	--	0	0	--	0	0	--
2.6	1	1	100.0%	0	0	--	0	0	--	1	1	100.0%
Total	66	39	59.1%	31	12	38.7%	13	5	38.5%	110	56	50.9%
> 1V	45	24	53.3%	16	5	31.3%	8	3	37.5%	69	32	46.4%
< 1V	21	15	71.4%	15	7	46.7%	5	2	40.0%	41	24	58.5%

Table 2

RPC Confirmation Rates for RPC NDD Indications in the Last Inspection
Composite Data for All Steam Generators in Plant

Plant	First Inspection Cycle/year	Second Inspection Cycle/year	RPC NDD in First Inspection - Second Inspection Data								
			≤ 1 volt Bobbin in 2nd Inspection			> 1 volt Bobbin in 2nd Inspection			All Voltages in 2nd Inspection		
			No. of Indications RPC Inspected	No. of Indications RPC Confirmed	Percent Confirmed	No. of Indications RPC Inspected	No. of Indications RPC Confirmed	Percent Confirmed	No. of Indications RPC Inspected	No. of Indications RPC Confirmed	Percent Confirmed
Plant A-1	EOC 12 1994	EOC 13 1995	0	0	--	84	37	44.0%	84	37	44.0%
Plant A-2	EOC 9 1993	EOC 10 1995	0	0	--	10	0	0%	10	0	0%
Plant P-1	EOC 9 1993	EOC 10 1995	21	18	85.7%	89	38	42.7%	110	56	50.9%
Plant R-1	EOC 7 1993	EOC 8 1995	68	0	0%	45	8	17.8%	113	8	7.1%
Plant AA-1	EOC 4 1994	EOC 5A 1995	21	10	47.6%	177	71	40.1%	198	81	40.9%

NOTE: The data for Plant D-1 were not readily available in a format that would permit categorization into the defined voltage bins by steam generator.